

Toth et al.

S/N: 10/765,583

In the Specification

Amend the paragraph on page 14, line 27, as follows:

Casing 164 is typically formed of an aluminum-based material and lined with lead to prevent stray x-ray emissions. A stator ~~170-180~~ is also provided adjacent to vacuum vessel 168 and within the casing 164. A window 182 is provided that allows for x-ray emissions created within the system 150 to exit the system and be projected toward an object, such as, a medical patient for diagnostic imaging. Typically, window 182 is formed in casing 164. Casing 164 is designed such that most generated x-rays 184 are blocked from emission except through window 182. X-ray system 150 includes an attenuation filter assembly 186 designed to control an attenuation profile of x-rays 184.

Amend the paragraph on page 16, line 31, as follows:

However, since mA modulation influences the edge flux, it is contemplated that the control of edge flux levels may be done relative to the average central flux level. As such, in accordance with one embodiment of the present invention, the adjustment of bowtie filter toward isocenter 216 and the adjustment of tube current 226 are based on an interdependent consideration of both the sensed maximum flux at the edge of the imaging object 210 and the sensed mean flux rate at the central portion of the imaging object ~~240~~220.

Amend the paragraph on page 21, line 10, as follows:

In accordance with an alternative embodiment, quality factor may be determined using a single diameter parameter d , where d is the average of a and b . In either case, once the proper bowtie filter configuration is selected ~~226~~236, the system is ready for scanning 328. As such, the patient table is raised or lowered dynamically during the execution of a helical CT scan to accommodate the changing optimum elevations depending on patient anatomy and centering/mis-centering. Elevation data is included in the scan data header to properly position the views during image reconstruction. If a continuous bowtie is present, the bowtie is positioned dynamically to follow the sineogram of the patient. That is, an attenuation pattern may be utilized that maps a dynamic configuration of the attenuation of the bowtie so as to achieve desired attenuation over time, i.e. during data acquisition.